Oesterr. Bot. Zeitschr. lxiv. 243 (1914), in part.—Leaf-blades 2.5–8 cm. long, 2-7 cm. broad: raceme 5–21-flowered, in anthesis 0.25–2 dm. long: lower bracts 2–4 mm. broad: calyx 6.3–10 mm. broad; its firm oblong to rhombic lobes 2.5–4.3 mm. long: petals 6.5–10.5 mm. long, 3.5–8 mm. broad: anthers 2.7–3.6 mm. long.—Chiefly in dry woods or clearings, or northward in bogs and swamps, Nova Scotia, Prince Edward Island and western Bonaventure County, Quebec to Frontenac Co., Ontario, Minnesota, South Dakota, and Georgia.<sup>1</sup>

GRAY HERBARIUM.

# REPORTS OF THE FLORA OF THE BOSTON DISTRICT,—XXXIII.

## CISTACEAE.

## HELIANTHEMUM.

- H. Bicknellii Fernald (H. majus BSP.; see Rhodora xxi. 36, 1919). Dry soil, common, especially southward.
- H. canadense (L.) Michx. Dry rocky and sandy soil, very common throughout.

#### HUDSONIA.

**H. ericoides** L. Cohasset Narrows (W. G. Farlow, August, 1877). Specimen in Herb. Gray.

<sup>1</sup> Andres gives a much broader range and cites specimens from Montana, Colorado, Utah and Idaho. These plants are certainly not var. americana. In his articles on Pyrola (as Pirola) Andres has frequently misinterpreted American plants and American literature. Thus, for example, he makes an amazing interpretation of a note by the present writer. In discussing the absence from Newfoundland of many common Canadian species the writer said: "But the distance across Cabot Strait, the shortest route from the southwestern mainland to Newfoundland is fully 70 miles, and, although this does not seem a forbidding gap, the fact remains that very many common Canadian species with fine spores or with the seeds plumose, feathery or otherwise adapted for wind-transportation have failed to cross from Cape Breton to southwestern Newfoundland. Among such species . . are Lycopodium sabinaefolium, Adiantum pedatum, Dryopteris marginalis, Pyrola elliptica and Chimaphila umbellata," etc. But Andres's Germanic mind has interpreted this list as an indication of the plant association to which Pyrola elliptica belongs; in his monographic studies of the genus saying under P. elliptica "Begleitpflanzen siehe Fernald. Expeditions [Expedition] to New-Foundland [Newfoundland]. Rhodora XIII. (1911) 147: Lycopodium sabinaefolium, Adiantum peltatum [pedatum], Drypopteris [Dryopteris] marginalis, Chimophila [Chimaphila] umbellata." (Andres, Allgem. Bot. Zeitschr. xx. 117. 1914).

H. tomentosa Nutt. Sandy seashore and sand dunes from Amesbury to Duxbury.

# LECHEA.

- L. intermedia Leggett. Dry sandy and rocky soil, common.
- L. Leggettii Britton & Hollick. Norwood, border of Purgatory Swamp (K. M. Wiegand, July 23, 1909).
- L. maritima Leggett. Dry sand, very common along the coast, but frequent inland.
- L. maritima Leggett, var. interior Robinson. Sandy soil at Andover, Tewsbury, Watertown, Sudbury, Dedham and Hingham.
- L. minor L. Dry gravelly roadside, Eliot St., near Morseville, Natick (K. M. Wiegand, Sept. 28, 1911); Sherborn (Miss M. L. Loomis, July 31, 1913); Hingham (C. E. Faxon, August 16, 1885; T. T. Bouvé, August, 1884).
  - L. tenuifolia Michx. Dry sterile soil, common throughout.
  - L. villosa Ell. Dry fields and woods, very common throughout.

### VIOLACEAE.

#### VIOLA.

- V. adunca J. E. Sm. (V. arenaria of Am. auth., not DC.; see Rhodora xv. 108, 1913). Wellesley Hills (Miss F. C. Prince, May 4, 1896). This specimen is in herb. Boston Soc. Nat. Hist. It is far out of range, the nearest station being in Northern Worcester Co. near Fitchburg.
- V. affinis Le Conte. Low woods, bank of Charles River, Wellesley (K. M. Wiegand, May 15, Aug. 26, 1909; C. F. Batchelder, May 7, 1910).
- V. ARVENSIS Murr. Medford St., Somerville (C. E. Perkins, no date, see Rhodora v. 156, 1903); Arlington (Miss Mary N. Plummer, no date); old field, Cambridge (M. L. Fernald, May 25, 1891); Dr. Geo. G. Kennedy's land, Milton (E. F. Williams, May 12, 1901).
- V. blanda Willd. Rare, in moist rich woods; Merrimac, Gloucester, Andover, Braintree, Hyde Park, Newton, Lexington.
- V. Brittoniana Pollard. River meadows along the Concord and Charles Rivers, also at Georgetown, Brookline, Stony Brook Reservation, Medfield and Mansfield.

V. conspersa Reichenb. Moist fields and open woods, common. White-flowered form at Acton and Concord (A. W. Hosmer in RhoDORA i. 223, 1899).

V. cucullata Ait. Swamps, very common throughout. White-flowered form collected at Purgatory Swamp, Norwood (N. T. Kidder, June 4, 1885).

V. eriocarpa Schwein. (V. scabriuscula Schwein.; see Bull. Torr. Bot. Club xxxviii. 194, 1911). Damp soil, often in woods, occasional.

V. fimbriatula J. E. Sm. Sandy places, very common throughout.

V. incognita Brainerd, var. Forbesii Brainerd. Damp woods at Salisbury, Boxboro, Arlington, N. Cambridge, Brookline and Weston.

V. lanceolata L. Swamps, meadows and wet shores, common throughout.

V. odorata L. Garden escape; reported from eight scattered stations.

V. pallens (Banks) Brainerd. Wet woods and swamps, common throughout. White-flowered form without lines at Franklin (L. R. Perkins in Rhodora xi. 164, 1909).

V. palmata L. One plant only, on shore of Concord River, Carlisle, with the abundant V. Brittoniana (M. L. Fernald, May 21, 1911). This is the only specimen of the species known from this region, and is entered on the authority of a determination by Dr. E. Brainerd.

V. papilionacea Pursh. Rich low ground, mainly about dwellings, common.

V. pectinata Bicknell. Meadows near Charles River in Need-ham and Dedham.

V. pedata L., var. lineariloba DC. Dry sand and gravel, common throughout. A form with rose-colored petals (V. pedata, f. rosea A. L. Sanders, Rhodora xiii. 172, 1911) has been found at Wayland (Miss A. L. Sanders); and also (see Rhodora xiv. 22, 1912) at Framingham (A. J. Eames) where noticed to be inconstant in color. A white-petaled form (V. pedata, f. alba (Thurb.) Britton, see Rhodora, xiii. 172, 1911) has been observed to persist at Wayland (Miss A. L. Sanders). A form with leaves digitately lobed was collected

in bloom at Prospect Hill, Waltham, by H. A. Purdie, Oct. 17, 1907 (specimen in herb. W. Deane) and at Carlisle, by M. L. Fernald, May 21, 1911 (specimen in Herb. Gray).

- V. primulifolia L. Swampy ground, common throughout.
- V. pubescens Ait. Rich woods, occasional.
- V. rotundifolia Michx. Rich woods, occasional in Essex Co., also reported from Framingham, S. Braintree and Holbrook.
  - V. sagittata Ait. Fields, occasional from Blue Hills northward.
- V. septentrionalis Greene. Fields and open woods; frequent north of Boston; only reported southward from Franklin.
- V. sororia Willd. Moist fields and woods; occasional, except in southeastern towns.
- V. TRICOLOR L. Gardens and fields, spontaneous and spreading, occasional.
- V. triloba Schwein. Rich dry woods, rare. Fifteen stations from Norwood northward.
- [V. CORNUTA L. was reported from a garden in Lexington by Miss M. P. Cook in Rhodora i. 81, 1899, but no specimens are available. This was also one of Minot Pratt's introductions at Concord, along with V. rostrata, V. striata, and V. canadensis, but these have all been extinct in this region for many years, see Rhodora i. 171, 1899. There is in herb. Boston Soc. Nat. Hist. a specimen of V. canadensis collected in 1822 by Dr. F. Boott, and marked "Boston, U. S. A." It is hardly likely that this could have been collected wild in our area and some clerical error is suspected.]

## HYBRIDS.

These reports are all based on actual specimens. Those reported by Mr. Forbes were transplanted to his garden in Brookline, and are growing there.

- C. Brittoniana Pollard × fimbriatula J. E. Sm. Near Fresh Pond, Cambridge (A, Gray, 1843); Needham (C. E. Faxon, May 1877, W. Deane, June 7, 1884).
- C. Brittoniana Pollard  $\times$  lanceolata L. Needham, Charles River meadows, only one plant found (F. F. Forbes, see Rhodora xi. 14, 1909).
- V. Brittoniana Pollard  $\times$  pectinata Bicknell. Charles River meadows, Needham and Dedham (F. F. Forbes, June, Aug., Sept.,

- 1906); Needham (C. E. Faxon, May, 1877, W. Deane, June 7, 1884); Sherborn (H. A. Purdie, Sept. 11, 1898, E. F. Williams, J. M. Greenman, Sept. 18, 1898).
- V. Brittoniana Pollard × sagittata Ait. Needham (W. Deane, June 2, 1888).
- V. cucullata Ait. × fimbriatula J. E. Sm. Hamilton, Arlington, Concord, Brookline and Milton.
- V. cucullata Ait.  $\times$  papilionacea Pursh. Dedham (M. L. Fernald, June 4, 1899).
- V. cucullata Ait. × septentrionalis Greene. Arlington Heights (M. L. Fernald, May 12, 1905); Framingham (F. F. Forbes, May 19, Aug. 18, 1907; July 28, 1906).
- V. cucullata Ait. × sororia Willd. Arlington (F. F. Forbes, May 24, Aug. 7, 1908).
- V. cucullata Ait. × triloba Schwein. Granny Hill, Lexington (J. M. Greenman, , 1905). See Rhodora vii. 56, 1906; хv. 115, 1913.
- V. fimbriatula J. E. Sm. × papilionacea Pursh. Brookline (F. F. Forbes, May 19, July 7, 1907).
- **V. fimbriatula** J. E. Sm.  $\times$  sagittata Ait. Carlisle (*C. H. Knowlton*, Sept. 6, 1902); Lincoln (*C. H. Knowlton*, May 17, 1908); Arlington (*M. L. Fernald*, June 5, 1904).
- V. fimbriatula J. E. Sm. × septentrionalis Greene. Amesbury, dry bank, Tyngsboro (C. H. Knowlton, May 30, 1901), Lincoln, Lexington, Arlington, Newton, Brookline.
- V. fimbriatula J. E. Sm. × sororia Willd. Arlington (F. F. Forbes, May 22, July 28, 1907); dry field, Sharon, (C. H. Knowlton, May, 1907).
- V. fimbriatula J. E. Sm. × triloba Schwein. Crevices in rocks in open woods with parents, Granny Hill, Lexington (B. L. Robinson & J. M. Greenman, Sept. 20, 1903; see Rhodora xv. 114, 1913).
- V. septentrionalis Greene  $\times$  sororia Willd. Arlington (F. F. Forbes, June 21, 1908).

C. H. KNOWLTON | Committee on WALTER DEANE | Local Flora.